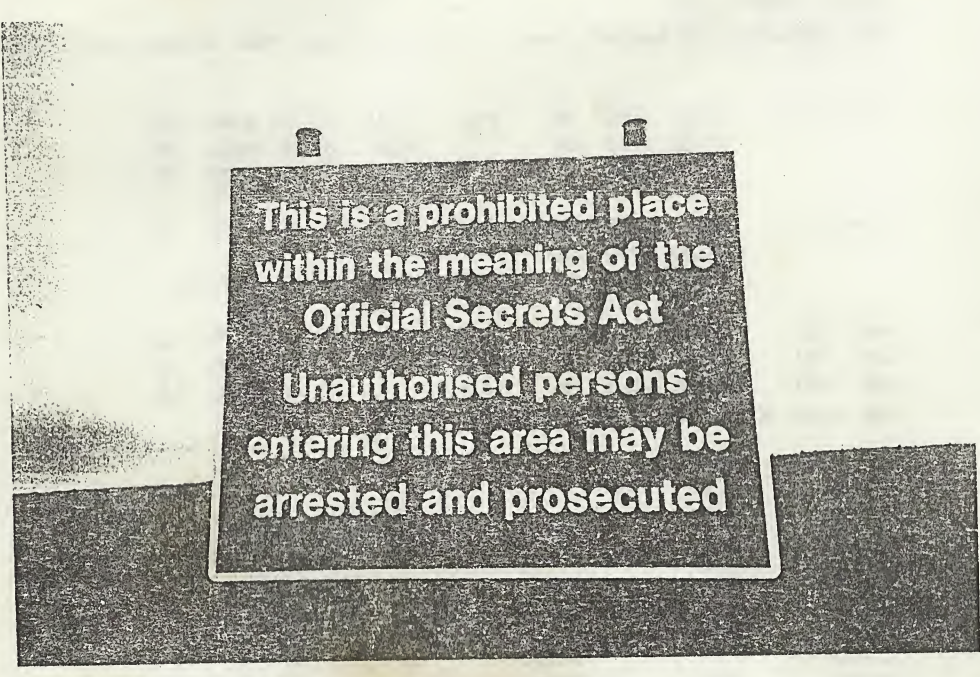


# E.N.I.G.M.A.

European Numbers Information Gathering and Monitoring  
Association

**FOR YOUR  
EYES ONLY**

**8**



**This is a prohibited place  
within the meaning of the  
Official Secrets Act  
Unauthorised persons  
entering this area may be  
arrested and prosecuted**

**\* PLEASE NOTE OUR NEW ADDRESS \***

**Our Address: ENIGMA NEWSLETTER**

c/o B.R.C., 17 - 21 Chapel Street, Bradford, West Yorkshire, BD1 5DT, England.  
via E Mail: MIKEC @ PRAXIS. CO. UK

ENIGMA is the journal of the European Numbers Information Gathering and Monitoring Association.

ENIGMA is a non-profit making association of listeners who monitor and gather information on 'Number Stations' and other related radio transmissions. ENIGMA aims to bring together listeners and enthusiasts and provide quality information on subjects not normally available from main-stream publications.

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You may pay by Sterling Cash, US Dollars, Eurocheques or American Express cheques (in Sterling) or by UK Cheques or Postal Orders payable to MR C A Midgley.

\*\*\*\*\*

Contributions

We appreciate all contributions to the newsletter (including anonymous information). We regret that we are not always able to provide a personal reply but, rest assured, we read and collate all information for present and future use. Questions are answered via our "Letter to ENIGMA" pages. ENIGMA is also a discussion forum and we welcome comments about the newsletter. If you are interested in writing a feature please contact us at the mailing address.

\*\*\*\*\*

Acknowledgements

Information in ENIGMA may be reproduced, but please mention ENIGMA and if possible the originator of the article, we would appreciate any cuttings in which ENIGMA is mentioned.

\*\*\*\*\*

NEXT ISSUE... The next issue of ENIGMA will be published in late October 1995.

Contribution would be appreciated by MONDAY 7th SEPTEMBER.

\*\*\*\*\*

Cover issue 8

This month's cover shows a 'Welcome' sign at a British radio installation. Location most secret.



ALL TIMES ARE UTC

ENGLISH LANGUAGE STATIONS

LINDOLNSHIRE POACHER (E3)

Transmissions continue on a wide range of frequencies operating between 10.00 and 22.45 hours. All transmissions start on the hour.

Uses a combination of three frequencies from the following selection.

4730 5422 5746 6485 6880 6959 7337 7887 8464 9251 10426 11545 12603 13375  
14487 15611 15682 16084 16475 (unconfirmed are 7351 7537 7755).

Some odd combinations are used, so if you cannot find the station try each frequency.

The station broadcasts for 13 x 45 minute segments per day but only sends 10 messages, each message consists of 200 5F groups each read twice, this form of traffic makes it impossible to detect dummy messages from real traffic.

	MON	TUE	WED	THU	FRI	SAT	SUN
10.00	H	D	H	D	H	H	D
11.00	D	H	D	H	D	D	H
12.00	B	B	B	B	B	B	B
13.00	G	G	G	G	G	G	G
14.00	F	E	D	C	B	A	I
15.00	I	F	E	D	C	B	H
16.00	H	I	F	E	D	C	A
17.00	A	H	I	F	E	D	B
18.00	B	A	H	I	F	E	C
19.00	C	G	A	G	I	F	G
20.00	G	B	G	H	G	I	D
21.00	D	C	B	A	H	G	E
22.00	E	D	C	B	A	H	F

The above matrix (thanks to Andreas) shows the way in which messages are sent. The 5 Figure ID code was used to construct the above schedule, these seem to be changed about every 13 days. Most agents receive a staggered transmission, probably to avoid the heavy jamming which affects many of the transmissions.

In the last issue we mentioned the use of 4730 kHz, these transmissions were only noted on Sunday at 22.00 and were in addition to 3 other frequencies in use at the time. 4730 kHz is registered for use by RAF inc. Akrotiri, Cyprus. Back in February 1992 we received information which suggested that Lincolnshire Poacher was transmitted from Cyprus and that jamming originated from either Iran or Iraq, the style of jamming is identical to that used by Iraq against BBC Arabic programmes during the Gulf War, although Iran and one or two other countries have also used it.

Recently we received some further information about LP's location, this time via a contact in The Netherlands who told us about a friend in Bulgaria who visited Egypt...he reported that some of the high frequency transmissions were coming from a SW site at Abis (G.C. 30.05E/31.10N).  
Comments welcome.

(HELLO TO DEREK - 8). (P.O. 492/333/5619 1952 44013782/7754 2250/- )

CHERRY PICKER (E4)

We are pleased to report this station is active again, although not all transmissions are daily.

12.00 17499 (under Radio Tunisia) on 17500 var.  
13.00 14469 20474 23411

All reports are required.

See also Letters To ENIGMA for further site information.

THREE FIGURE ENGLISH (E17)

The regular 08.15 transmissions for '274' now seem to have come to an end, but this station is still active, although irregular. We received a tape recording of this station - with excellent reception - in Kansas City Central USA.

Recent reports include (sorry some are incomplete) ;

Wed 03.20 5740 id unknown - 160 Groups  
??? ?? ?? 14362 372 (heard in USA)  
??? ?? ?? ????? 347 (heard in USA)  
Thur 20.00 10230 531 (May 5th) - 83 Groups  
ID's heard in last year include 208 274 372 347 482 531 636.

READY READY (E1)

Now operating to Summer Time (1 hour earlier than Winter) All times listed are UTC.

Mon WK2/4 19.00 4740 04 Mon WK2/3 20.30 4740 32  
19.20 3410 04 WK2/3 20.50 4460 32  
20.40 3910 04 WK2/3 21.10 5235 32

Tu WK1/2/3 18.00 4740 06 Wed WK2/? 22.00 6930 31  
18.20 3910 06  
19.40 3410 06 (Also noted Friday 19.30)

Wed WK1 18.00 4740 84 Wed WK1/2/4 22.00 5235 13  
Wed WK1 18.20 3910 84 Wed 22.20 4740 13  
Wed WK1 18.40 3410 84 Wed 22.40 4460 13

May move to higher frequencies for Summer months.

NANCY ADAM SUSAN Family (E15)

11.00 BEC 18000  
12.00 NAS 17502 \* could be 2nd harmonic of 5834  
12.30 NSA 11170 -but no trace on 5834 or 11668  
13.00 BEC 11000  
14.00 FYP/FVS 14000  
16.30 NAS 6715  
17.00 FYP 14000  
17.30 MSA 5834  
18.00 USP ? 5834  
20.00 NAS 5530  
21.00 MSA/RSM 4130

This operation is much larger than we originally thought and is sending quite a number of transmissions. HF reception is better in Britain. In the last issue we speculated about this station's location. We did suggest that Libya may be involved. Several contacts also suggested that near-by Tunisia (soon to be a NATO member) was involved in some form of 'Numbers' activity, although we cannot confirm NAS' family are from Tunisia - your comments would be welcome.



NNN (E12)

Some stations have, it seems, done very well in keeping their locations a secret, two in particular...NNN & Swedish Rhapsody. We will look at Swedish Rhapsody another day, but what can we learn about NNN? It has over the years used three languages: English, German & French, none of which it speaks particularly well. It does seem to give quite good reception in Britain which is either the result of a near-by location or a powerful transmitter - on the subject of which it only seems to have two!

Transmitter one sends in Voice - Transmitter two sends in CW  
 Transmitter one sends in MDW - Transmitter two sends in CW

Both transmitters can operate at the same time but not in AM - it seems to be quite good on the technical front, no bleed through from one transmitter to the other (unlike 'Strich' family) and no broadcast interference - it is probably the case that NNN is not at a broadcasting site. We have had reports that NNN is transmitted from Hungary - this is interesting - the country does have 3 SW b/c sites at Jaszbereny Diosd, Szekesfehervar, none of which are owned by Radio Budapest - but by the Hungarian Post. Transmitters range from 3/15/100/250 Kw.

VOICE ONLY					
Mon	10.00	8180 Repeated	21.00	5177	(4644 Winter)
Wed	04.00	5072 Repeated	21.00	5177	(4644 Winter)
Thu	04.00	5821 Repeated	20.00	5821	(5821 Winter)
Fri	04.00	5072 Repeated	21.00	5177	(4644 Winter)

ALPHA PHONETIC STATIONS (NATO ALPHABET) (E10)

We have had a good response from our recent features on these stations and would appreciate your help in gathering further information.

We would like to know.

- A) When did you first hear these stations?
- B) When did you first hear a particular call-sign (e.g. EZI, FTJ, etc.)?
- C) Have you heard call-signs not listed?

We have collated all the information we have at present in order to put together a list of main stations and family members.

STATION HEARD	1984	STATIONS HEARD	1994	RELATIVES		
	ART		ART			
			BAY	BEC	BAC	
	CIO		CIO	CIE	CIF	
	EZI		EZI			
			FTJ	FLU		
	GPO		GBZ	GBL		
	JSR		JSR			
	KPA		KPA	KPO		
	MIW		MIW	MIO	MLW	
	NCJ					
			OEM			
	PCD		PCD			
	SYN		SYN	SMN	SWN	
	ULX		ULX			
	VLB		VLB	VEB	VHF	VIB
				VLT	VLX	VUB
	YHF		YHF	YLX		
			ZWL			

We are pleased to report the following frequencies and comments based on your reports (latest call-sign indicated).

2120 KPA	2270 JSR	2515 VLB	2630 FTJ	2743 ULX	3150 PCD
3270 KPA	3417 ART	3940 ZWL	4165 CIO	4270 PCD	4360 SYN
4461 FTJ	4560 YHF	4665 VLB	4780 KPA	4880 ULX	5092 JSR
5170 GBZ	5230 SYN	5331 OEM	5435 ART	5531 BAY	5630 CIO
5715 ZWL	5820 YHF				

6270 ULX	6370 MIW	6745 SYN	6840 CIO	6911 OEM	7322 FTJ
7442 KPA	7540 EZI	7866 SYN	7918 YHF	8128 CIO	8464 SYN
8641 MIW	9130 EZI	9402 YHF	10820 SYN	10125 CIO	10352 VLB
11565 EZI	12747 MIW	12950 KPA	13533 EZI	13922 CIO	14000 SYN
14750 MIW	15980 EZI	17170 KPA	17966 VLB	19921 VLB	19715 EZI

Odd call signs heard recently include GBZ-J OEM-4 FTJ-8 VLB-14 etc.  
CIO also sent a 12 Group message on April 20th throughout the evening.

COUNTING STATION CONTROL TRANSMISSIONS (E14)

They now seem to be in decline - but are still around, all reports required.

Some may no longer be daily.

00.30	????		
06.30	7343 daily	13.30	11441
11.30	10940	17.30	11070//13465

COUNTING STATIONS (E5 & G5)

Still very active, tend to use regular 'short lived' schedules, traffic levels are high at present. Suffers occasional jamming. Some of the German language traffic from this station is now on late at night (see Simon Mason Writes...this issue). We have only included schedules in use in last three months. 2 voices have been reported during preamble - American & British.

DAILY 19.00	5153 (id 767)		
MON 01.00	5046 (G)	THU 18.00	6970//7907
MON 02.00	5790 (B)	THU 20.00	5153//6970//7907
MON 18.00	6970//8143		
MON 21.00	5153	FRI 04.00	5301 (G)
TUE 13.00	10529	SAT 12.00	11470
TUE 14.00	7871//10723//12221	SAT 13.00	10529//7547
WED 04.00	5301 (G)	SUN 11.00	11550//13555
WED 14.00	10597	SUN 14.00	12221//10716
WED 17.00	8085//6780	SUN 15.00	11123
WED 18.00	8143//6970	SUN 21.00	5153//6970//7907
WED 21.00	6970//8185//10162		

'MAGNETIC FIELDS' - NEW STATION NOT PREVIOUSLY REPORTED IN ENIGMA (E9)

This English language station first appeared in February 1995 on 6647 kHz and has remained on this frequency since.

It starts with a musical introduction from the 1981 LP by Jean-Michel Jarre - entitled 'Magnetic Fields'. This is followed by a message for 44D, spoken as 'Forty Four Dee'.

the message sent in poor English is repeated mid-way with "again again". The same message (with slight changes) was repeated from February to May when it was replaced with a new one, again for 44D.

MON 18.00	6647	Good Signal (modulation is often poor).
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It is almost certainly related to another new operation with a Middle East slant (see Middle East language section).



GERMAN LANGUAGE STATIONS

GERMAN TWO-LETTER STATIONS (G16)

We looked at these in detail in our last issue, for details of transmissions between 23.00 - 06.00 please see our feature 'Simon Mason Writes...' in this issue.

All transmissions start on the hour or hour + 30 with a two letter phonetic call sign e.g. MIKE DELTA, GOLF KILO, SIERRA BRAVO etc. We will list all known frequencies - with new ones underlined. Traffic levels in decline.

2690 2707 2745 3228 3262 4543 4594 4821 4888 5015 5182 5284 5732 5770 6765  
6853 7404 7532 7661 7740 7752 7858 8063 8173 9040 9325 9450

10170 10460 10500 10740 11617 11108 11545 12092 12210 12314 13362 13752  
13775 13890 14622 14945 15610 16055 16220 16414 17430 18195 18575 19295  
19755 20240 20350 20675 22885

Simon Mason tells us that some of the English language transmissions seem to have now ended, call-signs gone include VI, BN & DA. RD (German) not heard recently.

3 NOTE - ODDITY (G4) (ALL TIMES NOTED BELOW ARE UTC).

This station seems to operate on CET Central Europe Time. Times listed below are UTC. Changes frequency every month for each message cycle !

DAY	TIME	JAN	FEB	MAR	APR	MAY	JUN	JLY	AUG	MSG GROUP
TUE	19.00				4627	4647				E } weekly message
THU	19.00				4627	4647				E }
SAT	19.00				4627	4647				C
SAT	21.10 (20.10)	4627	5548	5472	6742	7538	(formerly Friday)			D
SUN	13.10 (12.10)	7832	7148	8824	7985	7719				A
SUN	20.10 (19.10)	3241	3425	3930		4698				B
SUN	22.10 (21.10)	4126	4357	4562	4751	5637	6547	5718	5617	A

THESE ARE PROJECTED ONLY

All reports of 3 Note Oddity are required, thanks....still around at 04.00

SWEDISH RHAPSODY (G2)

Some time back we did manage to keep track of the schedule, but seem to have lost it again ! We would like to have another go....all known active frequencies are listed. The station is now using LSB/USB on some transmissions. NEW FREQUENCY 8488

3825 4195 4779 5340 5748 8188 8488 are all active, please report if heard (note if Musical Count 1234567890 is used & whether it is a 1 or 3 message block). Listen out for repeat transmissions. More next time + suggested location.

GERMAN LADY '00000' ENDING (66)

Does not use regular frequencies but does have regular time slots, signal is always good - delivery slow and precise. Groups always paired.

MON	20.00	WED	16.00 *	FRI	21.20
TUE	19.00 *	WED	19.30 *	SAT	21.15
TUE	20.00 *	* indicate repeat on same day.			

Call ID's heard include 035 122 235 569 625 628; likes 4,5 & 6 Mhz area.

GERMAN LADY '000 000 ENDE' ENDING (67)

Messages are sent in Single Groups, uses 3 or 4 figure decode key. Each transmission is repeated on 2 further frequencies. (Null messages only repeated once).

		repeat freqs.	
MON	20.00	4594	CALL 736
TUE	05.00	8140 9040	CALL 510
TUE	06.30	7378 8178 9278	CALL 278
THU	06.30	7378 8178 9278	CALL 278
THU	19.00	???? 10450	CALL 146
THU	20.00	5830 6925	CALL 498
FRI	05.00	5066	CALL 704
SAT	07.00	12227 11127 9427	CALL 214
SAT	18.00	9127 8127 5827	CALL 214

Repeat frequencies only given where known. Both above use Nui & Noichen. We have received information from Germany that the this station listed above may be transmitted from FINLAND, we would appreciate comments from our readers, particularly in Finland. Who may be able to provide further information. We are only aware of the following sites in Finland which are situated at Helsinki & Pori. The information received suggests that this station is sent from a broadcast transmitter site in Finland.

SPANISH LANGUAGE (V)

See RUSSIAN/ENGLISH MAN section also

Four stations + above are operating,  
(V5) Counting Stations in Spanish  
(V2) YL 2 Finals ending  
(V3) YL 3 Finals ending  
(V14) 4F Control

(V3) Mon	07.00	5415	(V2) Mon	10.00 9230
Wed	08.00	6826	Sun	10.00 9147
Thu	07.00	5415		
Sat	07.00	7847		

MIDDLE EASTERN LANGUAGE (V8) NEW STATION NOT PREVIOUSLY REPORTED

Although some conclusions can be drawn about this station, nothing is very certain at present, it does seem to be related to the English language station MAGNETIC FIELDS (see this issue). The language of this new station cannot at present be identified, but is not a standard...such as Arabic.

SAT 18.00 6647 Signs on with music (Middle Eastern Style)  
Good signal but again poor modulation.  
Message repeats mid way ! ends with music.

Heard only on 10th April & 6th May, try each week, much help is need to learn more about this station. Peculiar group formation - not 5F.



## SLAVIC LANGUAGES

ZSECH LADY CONTROL STATION (S17) (was known as BULGARIAN BETTY)

The daily Voice 'Control' transmission continues.

daily 13.55 to 14.02 on 5027 // 4485. The station runs a much larger Morse set up. In the last issue we mentioned that this station may be broadcast via transmitters in the Czech Republic - the following information arrived from an ENIGMA member...ref ENIGMA 7, p7/21...I was surprised to find this station called Bulgarian Betty in Simon Mason's book. In fact, when I first heard the station on June 30th 1989, a time signal was clearly heard in the background. At that time, this time signal could only originate from the Czech station OMA at Liblice, near Prague (50.04 N, 14.53 E), operating at 500 kHz AM and 3170 kHz CW. When I noted the same station later, in December 1989 on 5447 kHz, the time signal was still there. So I concluded that the two stations were, in fact, quite near each other, the power of the OMA station being only 1 kW on 2500, & 5 kW on 3170. OMA has, in the meantime, ceased all operations on shortwave and now is only on 50 kHz LF.

STATION YT (S8/M27)

change; very reliable

J	06.30	4425	YT	VOICE MESSAGE
J	07.00	4425	BTV	(MCW MESSAGES)
J	18.10	4425	BTV	(MCW MESSAGES)
J	19.00	4425	YT	VOICE MESSAGE
EI	18.10	4425	BTV	(MCW MESSAGES)
EI	19.00	4425	YT	VOICE MESSAGES

DRUMS & TRUMPETS (S2)

Following some investigations into the various languages used by stations we are now 95% certain that Drums & Trumpets broadcasts in the Bulgarian language. Although we cannot be certain that it is in fact sent over transmitters in Bulgaria (not all German language stations are located in Germany) it does pose an interesting question...if it does broadcast from Bulgaria and it is related to the Ready Ready voice and MCW set which would be very likely.....question....are these stations all sent over Bulgarian transmitters?

1st Day of each Month at 19.30 4740 kHz (reception variable).

RAVEL VOICE (S18/19)

A firm reports of this rough sounding Czech Male, tends to use random frequencies and odd times of transmission....please report if heard.

**OLX** (S16)

OLX frequencies are the main note this time around, still operating 23 hours per day to the following schedule, mixed 50/50 voice and CW messages, the ID schedule remains unchanged. New frequencies 12275 & 18303.

0.00	to	04.00	5301	8142	12275
5.00	to	08.00	8142	9320	12275
7.00	to	16.00	8142	14977	18303
7.00	to	20.00	5301	9320	12275
1.00	to	22.00	5301	8142	12275

The address for reception reports and QSL cards is featured in our Letters to ENIGMA page.

THE STRICH FAMILY (S12/S11/G3/E3/M3)

Unlike DLX, The Strich is a numbers station in reverse, it likes to be hidden and sends very little traffic to its large array of agents. The purpose of this is, remains a mystery....very active in MCW/CW, messages are more frequent but still quite rare. Transmissions on a regular schedule but are prone to sudden frequency changes.

DAILY

05.30	5150	Calling 284	CW
21.05	4463	Calling 287	CW

WEEKLY

MON	07.30	5550	Calling 017	CW
TUE	07.00	6520	Calling 010	CW
TUE	08.00	7444	Calling 743	MCW
TUE	08.30	5520	Calling 019	CW
TUE	21.00	5053	Calling 752	GERMAN
TUE	23.00	3450	Calling 697	GERMAN
WED	07.00	6334	Calling 035	CW
WED	08.30	6330	Calling 047	CW
WED	08.30	7444	Calling 044	MCW
WED	09.00	7850	Calling 214	CW
THU	08.30	5520	Calling 019	CW
FRI	08.30	5520	Calling 019	CW
SAT	07.00	5150	Calling 522	CW

MONTHLY

1st MON	21.00	4463	Calling 755	'CHETTA'
1st & 3rd WED	21.00	5180	Calling 971	'CHETTA'
1st THU	04.30	6905	Calling 231	ENGLISH
1st FRI	20.30	5050	Calling 231	ENGLISH
2nd WED	06.00	6750	Calling 496	GERMAN

\* Messages heard 3rd May & 17th (May 17th:38 Groups), only the third voice messages have ever been recorded in many years. You can see how difficult they are to find with such a complex set of any reports appreciated.

RUSSIAN WOMAN '000' ENDING (S21)

All regular

Mon 18.40	5290	Calling 491	Sun 19.10 5290	???
Tue 17.40	5740	Calling 342	Sun 11.20 4833	???
Thu 17.40	5740	Calling 342		
Thu 19.40	5290	Calling 451		

We asked some of our readers in Russia for comments on this transmission....one reader told us 'I think, that she is from the European or Volga region of Russia'.

WE NEED YOUR RECEIPT REPORTS.....



RUSSIAN COUNTING MEN

In the last issue we asked about two different 'Counting Men'.

(S14) This was the form of a loop tape which played for hours on end, quality was poor - again a good friend in Russia tells ENIGMA... 'the loop tape...

he is saying I am Shield -58 have nothing for you 123456789 10...he also tell us the message changes to I am South -96 have nothing for you 123456789 10'.

Active beginning around 20.30 daily on usual 4633 kHz, but with a different message.

(S13) The second station takes the form of a live announcer - he appears on random frequencies and transmits for only 2 minutes.

A friend in Russia tells ENIGMA this station is sending 'I am UPT-76, transmit tuning, wait confirmation of tuning' (said twice) followed by 123456789 10 - 10 987654321 (said three times).

Last heard in early March at 05.00 on 4545 Counting.

RUSSIAN MEN IN ENGLISH, RUSSIAN & SPANISH (+ SPANISH LADY).(S6/S7 etc)

We promised last issue to look at who the messages are aimed at...we have received the following information which we feel readers may find of interest.

Our correspondent writes ... I was talking to \*\*\*\*\* in September and I asked \*\*\*\* about the English & Russian Man. \*\*\*\* said that most of this sort of communication is used to communicate with illegal agents. \*\*\*\* said that they had little contact with an embassy and the communications were for three types of agent.

- 1) Trainees who go abroad for the first time as part of their training.
- 2) Resident Directors who receive test broadcasts but undertake little operational work in peacetime but would take over spy rings in wartime. They often gather scientific and technical intelligence in peacetime or act as talent spotters for the recruitment of sources.
- 3) Illegal agents based in Moscow who are sent abroad for brief periods of time. This could be to meet an agent, conduct an interview or empty a dead letter box.

Due to the random nature of this vast set-up it is not worth listing transmissions, however some do have a semi-regular nature. ID's will be covered in next issue.

(S25) The Daily 'Control Transmission' can still be heard at ;  
08.00 14890 and 08.20 11270 ID always 615

In addition to the regular English Man and Russian Man voices - the station also has a Spanish language arm, consisting of a Spanish Man with calls (so far heard) of 212 & 346. Then just to add further to the confusion is the Female version 'Spanish Lady' she does have a semi-regular schedule and seems to like 21.00 22.00 or 23.00 UTC on either Wednesday Thursday or Friday, calls heard so far include 195 214 615 904 & 909. It is often more by luck than judgement that you will hear these stations, but reports are welcome and a note of the ID very much appreciated.

TUE 06.00 11083 repeat on 12182 '212' Spanish Man regular  
??? 09.00 12227 repeat on 11227 '214' Spanish Lady regular

FAR EASTERN LANGUAGES

We hope that you will enjoy our feature 'Looking East' in this issue of ENIGMA.

Some popular frequencies to try are listed below.

12.00 15.00 21.00 22.00 For 'New Star Radio' (V13) on 8300

Other unidentified stations have been reported on ;  
15.00 6400

Late afternoons 9000

Early evenings try 5738 6278 6647 8036 'Bright No Ha' (V9)

Sat 20.00 11028 strong signal - fast speaker. (V9 Again ?).

~~~~~

SINGLE LETTER HF MARKERS (MX)

The 'P' Markers is very active try 3165 3292 3806 3810 3838 3861 4031  
4044 4080 4091 6967

A loud 'Whining' noise sometimes appears between 4080 and 4110 variable around 19.00 UTC, at 20.00 this noise may carry with it a 'P' beacon, the two then go off air together at 20.05 UTC.

We recently heard a 'P' Beacon on 3838 send a message - it broke from its 'P' call to send '333 4790 8 5 00 =' followed by a 15 minute 850/50 FSK RTTY message then resumed sending 'P'. Most 'P' markers last for only 5 minutes however some last for hours.

Regular Markers are as follows -

C & S No change - all 'cluster' bands - continuous

R - 3323//3196 24 hours per day (7452 dropped & replaced with 3323)

V 4570 4371 3174 around most of the time - (all now disappeared)

L back again on 3091 still with pronounced 'chirp', 24 hours

L 4140 & V 8086//6859 irregular

~~~~~

POLYTONES (XP)

These were mentioned last time round. We are preparing a feature about Polytones for our next issue. A low & high pitch version seems to exist. Strong signals usually repeat following day at same time and frequency.

Heard around 18.00 on 5310 Tue & Thur

20.20 on 10372 Thur

6 TONES REPEATING (X6)

Very random in nature, sends 6 Electronic tones over and over, no messages sent - following tones.....I promise we will report further on both next issue. Quite active still



## VOICE STATION CONTROL LIST

### VOICE STATION CHECK LIST (see 'Station naming': ENIGMA 7)

Voice stations are classified strictly according to language. e.g. Station NNN in German, French and English would have three distinct reference numbers. To eliminate confusion over unknown or obscure/ambiguous languages and dialects the total number of languages has been grouped into four:-

E - English, G - German, S - Slavic (As a group, Slavic languages are easy to identify, but for the untrained ear not always easy to identify specifically. Slavic words for numbers are very closely related linguistically), V - all other languages.

Suffixes refer to variant forms of the same station, occasionally or regularly operating within the same period as the usual format. Earlier formats, later superseded, of the same station, but operative over different periods are classed as separate stations. The term 'variant' for our purposes applies only to format, not to schedule, nor to a different voice, nor to musical ID's. Variants have many forms, some being very minor and others radically different in preamble or message type.

#### ENGLISH

- E1 "Ready! Ready!"
- E2 Arabic Man or The Babblers
- E3 'Lincolnshire Poacher'
- E4 'Cherry Ripe' (Cherry Picker)
- E5 Counting
- E6 English Man - ends 00000
- E7 English Man - ends 000 000
- E8 "288 and 71"
- E9 'Magnetic Fields'
- E10 Phonetic alphabet - NATO (EZI etc.) A - all variants
- E11 "Oblique"
- E12 NNN
- E13 Five dashes
- E14 4F 'control'
- E15 Phonetic alphabet - pre-NATO (NAS etc.)
- E16 Two letter
- E17 English lady 00000 (274 etc.)
- E18 "Fife Free" (see 'Secret Signals')
- E19 Irish Man

#### GERMAN

- G1 Tyrolean music (both sections) A - irregular tunes  
B - phrase messages in first section and irregular tunes
- G2 'Swedish Rhapsody' A - counting variant
- G3 Gongs or chimes
- G4 Three note oddity (same voice as above)

G5 Counting  
 G6 German Lady 00000  
 G7 German Lady 000 000 A - 774-type variant  
 G8 Four note rising scale (same voice as above)  
     A - single repeated 5F group & Morse A's  
 G9 Jazz player  
 G10 Bert Kaempfert  
 G11 "Strich"  
 G12 NNN  
 G13 Five dashes  
 G14 DFC37/DFD21 (rising & falling 20 note scale)  
 G15 "Papa November"  
 G16 Two letter  
 G17 German Lady on 5420 kHz  
 G18 Eight note rising & falling scale  
 G19 German Man 000000 (same voice as G1)

#### SLAVIC

S1 'Aida'  
 S2 Drums and trumpets A - with bugle B - bugle only  
 S3 Czech words  
 S4 "Edna Sednitzer"  
 S5 DLX (earlier format - with null messages etc.)  
 S6 Russian Man 00000 A - 55555 00000 format  
     B - two group commencing 11111  
 S7 Russian Man 000 000 A - multiple two group  
     B - Multiple single group messages for same ID  
 S8 YT  
 S9 Polish counting  
 S10 Czech Lady (piano piece, later five notes)  
     A - 555 'idler' format  
 S11 "Preska"  
 S12 "Chetta"  
 S13 Russian counting and announcements (2 minute duration)  
 UPT76  
 S14 As above and of very long duration (Shield 58/South 96  
     etc)  
 S15 Rapid dots (an earlier DLX)  
 S16 DLX (present form)  
 S17 Czech Lady 'control' - single 5F message  
 S18 Czech Man - 3F 5F  
 S19 Czech Man 'control' A - 000 format  
 S20 "Aifada"  
 S21 Russian Lady (342 etc.)  
  
 S23 "Barbara"  
 S24 Russian Man "D-va" (voice very similar to S18/19)  
 S25 Russian Man 'control' A - 11111 22222 format

#### OTHER LANGUAGES

V1 'Ciocirlia' The Skylark - Romanian  
 V2 Spanish lady - two finals  
 V3 Spanish lady - three finals (same voice as above)  
 V5 Counting - Spanish 3/2F A - 4F



V6 Spanish lady 00000 .  
V7 Spanish man 000 000  
V8 Eastern music (6647kHz, language unidentified)  
V9 Oriental language - 5738, 6280, 8036 kHz  
V10 "Schlosst"  
V12 NNN (French)  
V13 New Star Broadcasting  
V14 Counting 'control' - Spanish

#### KNOWN FAMILIES

Direct equivalents (Morse and voice) are separated by /.  
Other transmissions operated by the same agency but not direct  
equivalents are separated by //. All equivalents use  
identical formats and often similar schedules and frequencies.

KGB/GRU: E6/G6/S6/V6/M14/M24//E7/G7/S7/V7/M12

CIA: E5/G5/V5//E14/V14

"Strich" family: G10?//E11/G11/S11/S12/M3

NNN family: E12/G12/V12//M2

Five dashes family: E13/G13

BND: G14//G15//G16/E16

'Aida' family: S1//S2//E1/M17

YT family: S8/M27

Czech family: S10/S18//M10//M11

S5→S15/M6A→//S16/M6

S17/S19

MI6: E3/E4

'Swedish Rhapsody': G2/M4

6647 kHz: E9/V8

All other stations would appear to be individuals, and show no  
obvious signs of 'family' relationship.

## Things That Go Buzz In The Night

Welcome along to another of our odds & ends pages....I would like to start with a mention of everyone's favourite noise - THE BUZZER on 4625 kHz, the trail on this seems to have gone cold and I would again like to appeal for more information....some-one somewhere must be-able to confirm its purpose. We have had some reports (see issue 5) about its connection with 'two highly sensitive countries' we have heard that one transmitter may be situated just outside the Polish border in Byelorussia....more info please.

THE CRACKLE Continues on 5494 & 5505 sometimes causes interference to Shannon VOLMET on 5505 kHz, the CRACKLE has also taken up residence on 4740 kHz which now seems to alternate between crackles and the other oddity the BACKWARD MUSIC STATION. The fact that these two unknown modes are using the same frequency without overlap suggests a possible connection.

Staying with 4740 kHz our good friend Mike in Kent monitored the following at 19.17 UTC on March 8th....

Male "Mercury One, Mercury One, test transmission, test transmission"  
Female "Roger, Go Ahead" - Then 10 seconds of "BACKWARD MUSIC STATION"  
followed by 1 second data burst.  
Male "Closing for 5 minutes", Female "Roger Out"

No further transmission heard until 19.30 when RAF/STCICS "Architect" broadcast was made. Finally for now...on the CRACKLE/BMS can any readers tell us if they know about a system called Link Plus (formally known as Linked Compressor/Expander ) Lincompex, and if these stations may be connected with its use.

THE PIP Still on 3757 & less often 5450 & now 7515.

ACHTUNG ACHTUNG - 'Spy' Author Wright dies, 78.  
Former British intelligence officer Peter Wright who accused 23 fellow agents of a treasonous criminal plot to topple Harold Wilson's 1974-76 Labour Government, died today (April 27th 1995).  
He died at his home in Tasmania of pneumonia, said a spokeswoman for Syney lawyer Malcolm Turnbull. Turnbull represented Wright in a lengthy court case when the British government tried to ban publication of his memoirs entitled Spycatcher.

The government resorted to legal action from 1986-88 in an effort to ban publication of Spycatcher and prevent newspapers and magazines from quoting it. But courts in the United States, Australia and 38 other nations rejected such efforts. The book was banned in Britain under the Official Secrets Act but was easily available. (YEP 27/5/95).ENDE ENDE.

FADERS We have not had any response to our enquiry about FADERS, this may in part be down to 'my' descriptions...I am going to make an effort to try and draw up a rough schedule of the more popular frequencies for the next 'Buzz' page, and will try again. These odd things have been around for years and are very active, particularly in the late afternoons and early evenings in Europe, with more help I am certain you will find them just as much an ENIGMA as our other "Things That Go Buzz in the Night".

Please keep listening, all comments and information very much appreciated...



## MORSE STATION NEWS

M1 A feature on this station was promised for this issue. Unfortunately, due to the discovery of new networks this has had to be postponed until ENIGMA 9. As predicted, its primary network (197, 025, 463) changed over to the 025 schedule at the beginning of May. This schedule will remain in operation until the end of August, after which, for the next two months 463 will take over again. Frequencies also changed to those predicted. The 025 schedule is as follows:-

Sunday	07.00	7340//6780	
Tuesday	18.00	5280//4514	
Tuesday	20.00	4905//3957	
Thursday	18.00	5280//4514	M1A/B - last Thursday of month
Thursday	20.00	4905//3957	M1A/B - last Thursday of month
Saturday	15.00	6434//5390	[rarely M1 though!]

Saturday's transmission has not been reported in ENIGMA before, however, it's not new, but has only just been confirmed as an 025. Usual group count for this network is 40. Other networks operate using GC's of 20, 30 & 50. (e.g. Saturdays 16.05 5350 (only) schedule number 053, usual GC: 30)

An odd thing happened on Tuesday 16 May; transmission suddenly stopped at 18.07 on both frequencies in mid message. About 5 minutes later a few feeble tones were sent. Some time later the operator sent a few practice dots and dashes. M1 is always hand-keyed and live! It wasn't until 1826 that normal service was resumed, when the message was continued from a point just before the breakdown without further mishap. (unusually it was of 30 groups) This episode doesn't make sense as the circumstances rule out transmitter breakdown, power cut or sudden death of operator - what actually did happen? One thing we can be sure of is that agents are expected to remain listening long after breakdowns. This station is prone to surprises and, being live, has a more human dimension than most nowadays.

M2 Nothing to report on this one apart from that the summer schedule is now in operation. As reliable and predictable as its voice counterpart, NNN. Same ID's in use; no 'special operation' ID's logged.

M3 See voice section under 'Strich'. (From ENIGMA 9 onwards our log pages will be set out in the same order and groupings as used in our new check lists - which should help to prevent confusion!) No new ID's but several old ones have reappeared. As usual, /00's predominate, but a few messages have been sent, the longest being of 69 groups for 017. Two new frequencies popped up on the same day - only 4kHz apart: Wed 15th March, 07.00 6334 035/54, 08.30 6330 047/57 - neither heard since. Another recent discovery is that Morse and voice ID's interchange: on Sun 7th May 496/00 appeared at 07.00 in MCW on 8033 - up to then 496 had always been spoken in German.

On the 1st & 3rd Wednesdays of May a Slavic ('Chetta') 971 appeared at 2000 on 5180. This ID was last heard three years ago in Morse. 333 or 111 triplets continue to be sent occasionally in the daily 284 & 287 transmissions. e.g. 284/333/00.

M4 Still active on 5340, 4195 & 3825. We hope to have a new Swedish Rhapsody schedule ready for ENIGMA 9.

DLX (M6) Some new frequencies in use. Schedule and ID's remain the same. See voice section.

M7 Active on regular schedule (not yet established) and closely linked to M10 - sometimes even sending identical messages. e.g. Mon/Tue 27/28th March at 1140 on 8190//7845 M10 sent two messages each time to ID's 355 & 966 (555-355 88 20,966 77 20). On the same Monday M7 sent a message to 355 with an identical decode key and group count: "\_ \_ 355 88 20.. \_ \_"

Active frequencies -never in parallel:  
3380,3385,4030,4835,5301,5470,5474,6780,7845,8111,8175,8190,93  
69,10992,13405,14977. Many used frequently. ID's include:  
035,078,109,234,351,355,446,529,619,765,771,791,802,803,833,863,  
,902,977,966.

M10 A 444 circuit number cropped up on Thurs 30th March on 5040 with two messages: 444-106 60 10,293 24 31. This is rare as 555 is nearly always used nowadays. 333 is equally rare. Regular schedules in operation - now using summer frequencies. For example: the 2nd & 4th Monday of the month at 0820 (repeating on the Tuesday at same time) where a 555 message is sent to a single addressee (always 253) used 8190//7845 until May. It can now be found on 9455//9165. Help is needed in compiling schedules for this station and M7. ID's active this year include:  
106,253,293,355,371,435,487,647,684,695,825,966,983.  
Frequencies: 3383//4485, 5083//5760, 8109//7845, 9455//9165,  
5860//5301, 5040//5737, 8111//?, 4573//?, 6943//?, 7475//?,  
11415//?, 14562//?, 14650//? See also M7.

M11 As usual, very little activity. I only caught this one once so far this year: Fri 24th March, 0800 on 5547, ID 633.

M12 Probably the most active of all numbers stations. Uses a bewildering number of ID's and frequencies which need correlating with other Russian stations in this family.

\*

M14 & M24 A fair level of activity continues - see above entry. These are probably versions of the same station. Keying speeds seem to vary - M14 often extremely fast. M24 ends with five long dashes, these being short for M14.

\* M13 See last entry.



M17 Now operating its summer schedule. The complete (we hope!) schedule for this station and E6 will appear in the next issue. Nothing new to report.

M18 This rather pointless quasi time signal is still with us on 4626, usually audible most evenings. On one occasion, this, the Buzzer and M12 were all around 4625 together - M12 almost wiped the others out!

MPL Seems to have disappeared. At least it can't be heard at 1320 on 10180. Maybe it's moved elsewhere. See letters page.

M20 This station has a habit of disappearing only to return months later for a short period before disappearing again. Last heard July 1994, it returned around the end of March sending several varied transmissions at 0700 & 0800 for several days on 6520 & 5625, often in parallel. On 5th April its frequencies changed to 6560//5665 and was last heard that day at 0800. It has not been heard since, however, on 23rd April at 1800 on 5540 a strong CW signal was sending "11111 11111 11111"....repeatedly for ten minutes - nothing followed. It was probably M20 in one of its guises. We will review its known activity to date in the next issue. See Stop press.

M21 After an apparent absence this inaccurate 'quasi' time signal is back on 5181, often //3297. No messages have been reported, although it sends its complex ID each minute for hours on end.

4XZ Is there anybody willing to do some monitoring of this station? As active as ever. Please send us details of transmission content.

M23 Not found recently but probably still active daily - where and when is the question! It now is likely to begin on the half hour also, and the usual null transmissions (odd No. ID) now only last for five minutes. Last heard January 1630 on 9285 sending "951 951 951" etc. Try 7520//7850, 7504//9285, 8307 or 5540.

KRH50 family These have all been off the air for some months. This CIA operation has been around since the early '70's at least, transmitting from Barford St. John. Perhaps the need no longer exists or maybe satellites have taken over.

M26 After a long absence, the '98' station has returned. (perhaps we should call it M98, so attached is it to that number!). It can often be found on 5170. A review of its activity will appear ENIGMA 9. It's not unusual to hear it sending "98 98 98 98 98 98 98 98" .... and so on, for hours.

M27 See YT under Voice Section. (BTV) Always sends 2 messages.

M28 (HEP) Nothing to report except that it operates one transmitter sequentially and continuously over four or five frequencies: 3314-(3825)-5268-6871-9186-3314..... Messages never sent.

M29 (VDE) Tue 21st March: 07.00 5847 with the usual ID. Has anybody else heard this rarity this year?

M31 (FDC) Thanks to Ian in Scotland for reports of this strange French station (not to mention his many other detailed logs). We will cover it more fully at a later date - any further information welcome.

M32 Has long disappeared from 14403. Due to lack of space our promised feature has had to be postponed - it won't be forgotten, however, now that it's on the check list!

M33 The strongly suspect P8K has returned and can now be heard sending lengthy multiple messages on 6960 most evenings.

M34 First reported last August by Harold of Southampton, I've logged it only once since: 2.8.94 19.10 5038 with messages to ID's 13,11,17 & 19 (in that order) and on Mon 6th March at 18.00 4050 with messages to 93 & 37. Listen out for this one - it begins with 5 minutes of "11 12345 11 12345" etc.

Lastly, M13 which somehow got overlooked! An easy one for beginners in Morse as it is slowly sent and easy to find and identify. New ID's this year include 206,285,346,497,714. Frequencies not worth listing as there are so many, but newly active ones include 11309, 9013, 8086, 7984, 6778 (and more down to 3842.) Some 'message indicators' have now reached the 150's; at one time they rarely reached 130.

Additions to the Morse Check List - some of which are new stations to be covered fully when we have the space.

M35 - V's and K's

M36 - Consecutive numbered messages. Ends 'AR AR'

M37 - Abbreviated: 5F ID

M38 - Wideband SPARK (Yes!)

M39 - 3F & 5F repeated (may be a variant format of another station, so it may lose this number in the future)

M40 - CQ 3F

M41 - WZD (with thanks to Fritz in CH land)

There are many more suspect Morse stations around, but the above are almost certainly ENIGMA material. See what you can find and send it to us!



## Letters to E.N.I.G.M.A.

A warm welcome to issue 8 of ENIGMA. We must start by thanking all our readers who have taken time to write in, I am sorry we cannot write to every-one personally, but your letters comments logs and news are very much appreciated. ENIGMA was featured on Radio Nederlands DX programme in February and 'our man' Simon Mason was interviewed by programme editor Jonathan Marks. We have also appeared in the German magazine 'Funk' and in Short Wave Magazine's - Off The Record page.....

Onto your letters, and first it is time to give due credit. We received an excellent response to the feature last issue 'The BND & Electronic Surveillance', the original photo-copy of this was sent to us by Hans in Trier. Unfortunately, the article and the letter had become separated at our office - so we were unable to thank Hans at the time of publication. Hans and another reader wrote to tell us the following information.....

The article is a shortened, but very good translation of Chapter 13 of the book "Elektronische Aufklärung". Erich Schmidt-Eenboom, Schnuffler ohne Nase : Der BND - die unheimliche Macht im Staate, Econ-Verlag Dusseldorf, 1993. ISBN 3-430-18004-X  
Approximately DM 40

Staying on the same subject we asked about two sites which we were unable to locate : Kreuzholzhausen & Stockdorf. Several readers sent us maps of the Munich area showing these sites, both sites are close to Pullach, home of the BND - as one reader puts it, 'German agents are very thrifty concerning travel expenses'...thanks to Hans & another contributor for assistance with this subject.

Following our feature on EZI, Brian wrote in with a few more suggestions. He tells us, 'I have been looking at other Alpha Phonetic callsigns with a view to carrying out a similar study, but none seem to be stable enough to achieve this. I am sure that this is significant. Perhaps other callsigns are used for agents who are constantly on the move around the world, while the consistent signals of EZI transmit to those agents permanently living and working in various countries'.

Staying on the subject of Alpha Phonetic stations we received a detailed letter from Thomas in Kevelaer, Germany, Thomas has a long standing interest in Number Stations and sent us lists of frequencies for each station he as monitored over the years. He also comments on the problem of station naming - something we are very familiar with. He tells ENIGMA that the Alpha Phonetic stations use a system called 'Aroflex'. This is a crypto-system of 5 Letter groups developed by Siemens for NATO wide use. We would be grateful for any further information concerning Aroflex.

Harold wrote to us from Southampton. He asks, 'how do you feel about messages originating from China ? With a very large set-up it is surprising how little is known about it'. Their transmissions surely must appear on SW but nothing ever seems to be heard about them, or do they have some other means of communication which does not employ radio? Any chance of something in ENIGMA ?' Well, we have made a start with our feature on New Star Radio. We have also opened up the logs of all suspicious Far East language transmissions. Logs appreciated. If any readers can tell us more about main-land China's communications please write in.

Staying in the Far East a little longer, readers will have noted the return of Lincolnshire Poacher's sister station, Cherry Picker. We did suggest that these transmissions may operate out of Taiwan. A regular correspondent writes, 'On the subject of Cherry Picker....Taiwan is a reasonable possibility but Brunei is another. A Far Eastern site was probably needed following the closure in the early 1990s of the MI6/ASIS (Australian Security) radio station at Kowandi near Darwin in Australia which controlled joint operations in that part of the world and also the loss of various facilities in Hong Kong'.

On page 22 of our last issue (7) we mentioned Polytone transmissions, & have received quite an amount of information on this subject, much of it concerning the case of Hugh Hambleton, a Canadian professor who had worked for NATO whilst working for the KGB. We also received an extract from a book called 'KGB - The Secret Work of Soviet Secret Agents' - by John Barron - Corgi 1979, which mentions a similar subject. We are gathering up information on Polytone transmissions for a feature later in the year.

Information continues to arrive about the peculiar SW station which used to send horse racing results... 'Deutsche Sportverlag mit Sportnachrichten', Richard tells us that DFD89 is listed as DSV Cologne in the 1984 ITU listings. Another reader wrote, 'DFD25 etc. I heard these stations at various times of day, and, in fact, they were broadcasting not only the results, but also reports of horse races at bookmakers. The amount of reception reports on these transmissions must have convinced the DSV people at Dusseldorf to stop using shortwave for this service, so it disappeared from the airwaves after a relatively short period'.

We also asked about the site called RAF ASH. We are never disappointed by the response of our readers....ASH was initially an RAF Radar station, later becoming joint MOD/CAA owned - for long range ATC Radar. Now it has been completely refurbished for use by RAF Air Defence Radar, but only as a standby location. The main East Coast Air Defence Radar centres being at, Saxa Vord, Buchan, Boulmer, Staxton Wold, Patrington, Neatishead, Bawdsey. Another reader reports, 'Ash has been refurbished, new perimeter fence with razor wire topping inside old perimeter, dog patrol warnings, beautifully tended grounds and not a soul in sight' We will keep you posted. If you would like to give RAF Ash a call the telephone number is 01304-812501, although our picture cover this month may give you a clue to the response you are likely to receive !

On the subject of secrets a reader in Kent tells ENIGMA 'there used to be a railway siding concealed in woods, not far from the village of Wye. A 12ft high fence and a sign proclaiming to be the "International Pipeline Agency", actually concealed a government underground aviation fuel storage depot. So you can never be sure that things are what they appear to be'.

Last time round we also mentioned MPL - still heard daily at 13.20 on 10180 kHz, a station called MPL2 was listed as Witney in an old ITU listing, the British Telecom training school is very near Witney & so is RAF Brize Norton and RAF Bampton Castle (MLP).....please keep monitoring MPL.

Thanks to Ian in Perthshire, Jacques in Amstelveen, Ary in Spykenisse, Alan in Solihull, Richard, Ashley in New Zealand, and YOU for taking the time to write to ENIGMA.

LETS HEARFROM YOU.....NEXT DEADLINE SEPTEMBER 7th -NEXT ISSUE LATE OCTOBER



One of our regular contributors, Peter, in Saffron Walden sends in a fine selection of logs and interesting observations. He specialises in monitoring the 'Counting Stations' - and notes that they seem to have stopped using the long-standing frequency of 5715 kHz. We think this may be due to Radio REM-4 the oddball Russian Met station, REM-4 signs on with that ear splitting tone upto one and a half hours before the 21.30 UTC transmission, Peter also asks if the 3 Note Oddity as changed its call-sign ? The answer seems to be yes...instead of the wobbly tape of the 3 notes playing before the transmission, a 'electronic' 3 tone signal is now sent...as Peter observed.....it now sounds like a Rolf Harris Stylophone... good to see technology marching on at the 3 Note station.

On the subject of Radio REM-4 pronounced 'Radio Ram Chetiry'e', Vassily, in Moscow, sent us the station address. If you would like to QSL the station you can contact them at : The Geophysical Institute, Rostokinskaya 9, Moscow, 129128 RUSSIA. On the subject of mailing addresses, Vassily asks if we could give address of OLX - this is : OLX Ministerstvo Vnitra CR, P>B> 21/SK, 170 34, Praha 7, The Czech Republic.

We would be interested to know if any of our ENIGMA members belong to the amateur radio - Intruder Watch. This monitors and reports on unauthorised transmission in the amateur radio bands. We are interested in those Number Stations which stray into these areas. Staying just for a moment on a similar subject, we recently mentioned RAF Digby in Lincolnshire A regular contributor wrote to tell us that in the early 1980's a fellow amateur wangled a visit to RAF Digby and was somewhat surprised to find a section which specialised in monitoring the amateur bands, both VHF and HF ! Digby is operated by RAF Signals Intelligence (SIGINT) on behalf of GCHQ. Greetings now to Don Schimmel, editor of 'Communications Confidential' in the US book stand magazine 'Popular Communications', who wrote to say how much he enjoyed ENIGMA. You will find a review of Don's book, 'The Underground Frequency Guide' in this issue of ENIGMA.

Two quick thank-yous, first to Richard, in Andover, who has made a New Year's resolution to try and send in regular logs to ENIGMA. Also, nice to welcome back Keith, in Arundel, Keith, has recently moved house and is still setting up his new QTH. He sent us some cipher information - his favourite stations are the Alpha-Phonetics. We would be interested to know if readers would like to see more on related subjects such as codes and ciphers ?

Greetings now to Andreas in Landsberg, Germany, thank you for all your contributions. We are still gathering up information about the 'Tyrolean Music Station' (see previous issues of ENIGMA) and Andreas sent us some very detailed information about transmitter sites around Burg. We will be featuring the Tyrolean Music Station, hopefully in the next issue. Andreas also sent us the detailed analysis of 'Lincolnshire Poacher's transmission schedule - see station news. He also tells us about a new German radio magazine called "Radio Horen" (Listening to Radio) which published its first issue in February. The second issue is out on April 7th and will carry a feature about the 'ENIGMA' code machines used during WWII.

To end - HEP, the mysterious Morse station. We received a copy of a QSL list in which a listener in Rumania (not an ENIGMA member) claims that he QSL'ed HEP which is listed as Kantonspolizei, Zurich, Switzerland, ....comments please (this suggests border police !)

Thank you again for all you contributions.... Good Listening.....

HELP NEEDED !

HELP NEEDED !!

HELP NEEDED !!!

Since ENIGMA began, it has grown beyond all expectations, and with it, so has the workload - which has fallen on the small editorial team. We have found that certain important areas are becoming neglected or taking a back seat.

We are looking for help in the following areas -

- 1) A local membership administrator - to deal with subscription matters, sample issues, maintenance of membership records, typing of address labels. (Applicants will be positively vetted ! M15 applicants requiring a copy of our membership list need not apply ).
- 2) Volunteers willing to specialise in a particular station, with a view to compiling accurate and detailed operating schedules and ID records. Schedules often change so this would be a long term task, should you wish to continue. (We would supply you with all known details on the station involved e.g. READY READY, SWEDISH RHAPSODY etc). Please indicate any preferences.
- 3) Morse traffic levels exceed those of voice stations and therefore, we need more dedicated Morse monitors...are you willing to assist ?
- 4) In the background to ENIGMA we are building up an historical archive of Number Stations. Members who have monitored these stations for many years are requested to provide information in the following areas :  
  
When did you first hear a particular station ?  
If it is no longer operating, when was it last heard ?  
Do you have any old logs or recordings available ?
- 5) Transmission sites. We are compiling a comprehensive list of all HF sites (transmitting/receiving). We particularly need information outside the UK on site location and purpose. Do you live local to any such sites, and can you provide information ?
- 6) We are very keen to identify a few languages used by Numbers Stations. Also, a few pieces of music are still unknown. Can anybody help ?
- 7) Finally, did you know/or do you know the 'Laughing Cavalier', G F Merrick (!), "Langley Pearce", Peter Quintel? All are, or have been, associated with Numbers Stations but do not appear to be in contact with ENIGMA. Any information on the espionage-related activities of Radio North Sea International, and its on-board Numbers transmitter would be much appreciated.



## LOOKING EAST

Regular readers of ENIGMA will be familiar with the wide range of Number Stations which we report, for the most part the stations heard in Europe transmit in English, German, Russian, and other Slavic languages. Our friends in the United States hear stations in English and Spanish but these are not the only homes of the Number Station mystery.

Recent tensions in Korea and Hong Kong along with the ever present third force, China brings a whole area of Numbers we have not yet explored, add to this the United States plans for a "Radio Free Asia" service to be beamed from Thailand to surrounding countries and we have the makings of some interesting listening.

Let's not forget that Britain's interests stretch into this part of the world as we have seen with the recent transmissions from Lincolnshire Poacher's sister station "The Cherry Picker."

In this issue (Station News) we have detailed some of the Far East Number Stations you may well receive. We have to admit that monitoring can be a bit difficult but I hope the following article will inspire you to tune Far East.....

This article is credited to Jerod Pore in California and was first published by Havana Moon, it is written from a United States perspective but this station can be heard in Europe- please see Station News in this issue.

### THIS IS CHANNEL FOUR BROADCASTING STATION IN TAIPEI by Jerod Pore

Every day, between the hours of 0930 and 1330, we West Coast monitors of strange shortwave transmissions can tune into 8300 kHz and hear what has been identified as "New Star Broadcasting". We hear on this station a series of numbers read in Mandarin. We check the WRTH and find that slice of the spectrum to be under-utilized, with a time signal station in Japan at 8000 kHz, some local Peruvian stations at 8003 and 8065. local Mainland Chinese stations at 7935 and 8007, more time signal stations from South Africa, Sri Lanka and Brazil at 8461, 8473 and 8492, respectively. South American and Pacific Island illegal hams frequent the area in question, as do a few utility stations, but there are no listed broadcast stations at 8300 kHz.

More or less on the hour, usually on the half hour, and sometimes on the quarter hour, we are treated to an unknown piece of music featuring violin and flute. Then we have a woman making an enthusiastic announcement. Another woman gives the station identification, which includes a phrase that, at first sounds like "New Star Broadcasting, Taipei". Then, there is some more flute and violin music.

For a couple of minutes this woman broadcasts something in Mandarin, in the midst of which I was able to pick out the occasional series of three-digit numbers. After she is done, the first announcer comes back on the air, saying something, then begins to read a series of four-digit numbers, each four-digit set is read twice. The numbers continue for varying lengths of time. At the end of each series, or the start of the next series, the woman announces something, then starts the next series of numbers. This will continue for anywhere from five minutes to half an hour. When there is no reading of numbers, there is a strong quiet carrier, and on the quarter hour the music and station identification, another short series of numbers, quiet carrier to the half hour and so forth.

On other days, the numbers have continued for slightly more than half an hour without a break. At the end of the numbers, the woman makes a more enthusiastic, almost revolutionary sounding announcement.

One morning, I taped ninety minutes of transmissions. A friend of mine is from Taipei, and I enlisted her as a translator. She is unfamiliar with the joys of selective fading, static, jamming and such, so she could not put up with the entire tape, and although she speaks the Taiwanese dialect fluently, we realise that her translation may not be perfect.

My friend could not identify the music used to begin the broadcast. The first enthusiastic announcement is: "We are ready to begin transmitting". The station identification is "This is Channel Four Broadcasting Station in Taipei, Republic of China, on 8300 kHz". The word 'Broadcasting' is practically the same in Mandarin as in English - 'Station' is close in both languages, and "Channel Four" could be heard as an English "New Star". The phrase "New Star" has a lovely Chinese flavour to it.

We both understood how easy it could be to mis-identify the ID. During the announcement broadcast times are given.

After the short music break, the announcement that contained three-digit numbers is translated as, "We are sending telegrams from the following units to the following units". Each unit was identified by a three-digit number. Most, but not all of the receiving units were also identified as being "in Japan". My friend said that *unit* was the closest translation she could come up with.

The phrase that prefaced each series of four-digit numbers was translated as (with bogus numbers for purposes of example), "We are sending a telegram from unit 123 to unit 456, in Japan. Unit 456, please prepare to receive. The telegram contains 10 words." The enthusiastic woman would then read ten sets of four-digit numbers. The phrase is actually much shorter than translated here, but refers back to what was previously announced.



The "revolutionary" announcement at the end of the transmission translates as, "This concludes our broadcast ! Thank you for receiving our telegrams !" Perhaps she was just happy to be finished with a twenty-five minute broadcast.

The key concept in all of this is the telegram. In Taiwan, the sending of telegrams involves the use of four-digit codes. If a telegram is sent over teletype wires, the operator translates each ideogram into four-digit code. The code are then translated back into ideograms at the receiving end. This allowed the use of standard teletype equipment, or even Morse code before teletype was readily available, to send messages across the country. When one received a telegram, the codes appeared below the hand-written Chinese characters.

Now this is a very logical and legitimate explanation for these broadcasts - the sending of telegrams to Chinese speaking residents of Japan. However, the translation raised more questions than it answered.

First of all, the widespread installation of faxes and computers with Chinese keyboards has made the coded telegram nearly obsolete. They are still sent this way, but they are becoming rare.

There is an immense data highway running between Taipei and Tokyo, the bandwidth of which is measured in gigabytes. It seems archaic to resort to a shortwave voice transmission to convey this information. If it were necessary to use radio, why use voice and not RTTY ?. And if it is necessary to use voice, why the four digit codes being used instead of just reading the contents of the telegram ?

If this information is being broadcast only to Taiwan and Japan why is the signal so strong on the West Coast of the United States.

One could classify this as a utility station, so why the musical introduction ? And why is that woman so enthusiastic at the beginning and ending of each broadcast ?

Channel Four is an interesting catch, and one can speculate endlessly on its 'true' mission. My favourite guess is that the broadcasts are intended for the authorities of the People's Republic, to make them think that Taipei is communicating with operatives on the mainland. Beijing may protest, but there is the cover of legitimacy about Channel Four....

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**ACHTUNG ACHTUNG !!!** While listening to Newline on Radio Netherlands, they mentioned the goings on in Korea. The person been interviewed mentioned that North Korea uses the 3/2/3 pattern of numbers to send messages to its agents in the South...**ENDE ENDE** (Ashley New Zealand).

# Simon Mason Writes .....

## THINGS THAT GO 'FUNF' IN THE NIGHT...

While we sleep things continue to go 'Funf' in the night, while some stations do not mind extra listeners others like the cover of darkness.... In the hours between 23.00 and 06.00 UTC many different familiar and not so familiar Number Stations can be heard.

The Czech station OLX, after its break at 22.00 continues each hour through the night until 06.00 on 5301/8142/12275 kHz with its CW and Voice messages.

Perhaps the most interesting night for OLX is Saturday between 00.00 & 06.00 UTC when, other than at 03.00 all transmissions are Voice messages.

The Alpha-Phonetic stations also transmit through the night on many frequencies, VLB, ULX, EZI, ART, JSR, SYN, FTJ, CID, PCD, MIW, YHF, and KPA can all be heard on the usual frequencies, although messages seem to be few and far between. For instance, listen on 3417/5437 at 03.30 and you will usually hear 'Alpha Romeo Tango 2' or on 4880 at 03.00 will bring up 'Uniform Lima X-Ray 2' !

Counting Stations are surprisingly common during the night . Many of these are Spanish, a few examples are the daily 'Control' broadcasts in 4F at 02.30 UTC on 6840//9955 kHz which can be heard very well at times. Conventional 3/2F Spanish broadcasts include 9222 kHz at 02.00 UTC, 12300 kHz at 00.00 UTC, 14421 at 00.00 UTC and 6797 kHz at 05.00.

The familiar German language Counting Stations which used to be more common in the European evenings also seem to have taken cover in the dark of night, recent logs include Wednesday/Friday at 04.00 on 5301 kHz (a poor choice of frequency which clashed with OLX) and also on Mondays at 03.00 UTC on 5790 kHz. An English language Counting Station has also recently been noted on the low frequency of 4470 kHz on Friday at 01.00 UTC.

Station N N N with it YL in English can also be found in the early hours with a good signal on Wednesday at 04.00 on either 4024 or 5027 kHz and on Thursday at 04.00 on 5821 kHz. Now using summer frequencies.

Last but not least the German 2 Letter stations have been very active during the night recently on unusually high frequencies, here are some of my latest loggings

23.30	HK DAILY ON EITHER 6853/7532/8063/9325						
	SB MONAY TO FRIDAY 8173/9325/9450						
00.00	CD DAILY ON EITHER 9450/10177/11545/10500						
	MON	TUE	WED	THU	FRI	SAT	SUN
00.30							
01.00							
01.30		GK/4594		GK/4594		GK/4594	
02.00			CN/8063		CN/8063		
02.30	CN/8173				SB/5732		
03.00				CN/9325	CN/9325	CN/9325	SB/9325
03.30		CN/10177				CN/10177	CN/10177
04.00							WL/5284 or
04.30							5732



## Logging Numbers Stations

Mike, Bath, UK

Why bother with good logging disciplines when listening to numbers stations? Well, there are lots of reasons! This article aims to help you and your listening with a few practical tips to get the most from what you hear. What's more, you'll help other listeners, and the ENIGMA team too if you send us your logs.

A copy of the logsheet that I use can be found at the end of this article ready for you to copy and use if you like.

### 1. Why a Numbers Station Monitor Should Keep a Log...

In the three or four months between each issue of ENIGMA, the team receives hundreds of numbers stations logs from listeners around the world. In addition to preparing the next issue, the team religiously comb through each and every one of these logs looking for new and interesting catches, as well as confirmation of, or a new insight into, one of the regular stations.

As you can imagine, this task takes up a considerable amount of time but we do it because there might be just a few more clues to help us on our way to identifying a new station or some extra piece of schedule information. The logs sent in vary considerably, from well-kept computerised records to hand-written notes. But the format is of little importance, it is the *content* that is of value, and in order to help us and other listeners the most, we need accurate and complete information. Providing the right information can save an awful lot of time and effort in checking and confirming the details that you send us. Here are some reasons why a logbook is so important.

#### 1.1. Accurate Logs

All information kept in a logbook should be as comprehensive and accurate as possible. For example, times should be measured to the minute and frequencies to the nearest kilohertz. The information held should be easy to find, both for you and for others.

#### 1.2. Helping Analysis

A good logbook should contain all the right information to help you in analysing the traffic sent by a station, in determining its transmission schedule or in helping to pinpoint its location. If you send your logs to someone else, they should also be able to use your information. Your one catch of a station might seem insignificant to you, but it may be the last piece of information that allows someone else to construct the station's schedule!

#### 1.3. Historical Checking

Lastly, it's important to remember that stations come and go, or can have very long and extensive transmission schedules. Maintaining past logs properly can allow you to "keep tabs" on these stations.

## 2. What does a Good Logbook Contain?

Having discussed some of the reasons for keeping a logbook, we now need to consider what information the logbook should contain. It's important to realise that we all have a different idea of what comprises the perfect logbook and how it should be kept, but as we've said before, every logbook should at least contain the basics.

### 2.1. The Essentials

These are: *Date and Time, Frequency, Mode, Station Name or Identifying Characteristics, Sex, Language*

#### 2.1.1. Date and Time

Abbreviated formats for dates aren't consistent between a large number of countries. For example, 02/03/95 is a different date according to whether you are English or American! To counter this problem, I record dates in an unambiguous way, like 2nd May 1995. Also, to the experienced numbers monitor, the *day* is just as important as the date, so try to quote dates in full: Thursday 22nd March 1993.

If possible, always use Universal Co-ordinated Time (UTC), and use the 24 hour clock. For example, 1302UTC. Record the time that a transmission starts and optionally, the time that it ends.

#### 2.1.2. Frequency

Record the frequency of the transmission in kilohertz (kHz) and measure, if possible, to the nearest kilohertz. For transmissions in AM, CW or MCW, tune to the zero beat of the carrier and record that frequency. If you are unsure of the frequency calibration of your radio, use a well known broadcast or time signal station (such as WWV on 10000 or 15000kHz) and measure how far off it is. If you notice that a station is transmitting the same (or different) signal on more than one frequency, then note the "alternative" too. The common shorthand for doing this is, for example, 5205//8560kHz. This means that the parallel frequency to 5205kHz is 8560kHz.

#### 2.1.3. Transmission Mode

Record the transmission mode as follows:

- AM for Amplitude Modulation, full carrier
- USB for Upper Side Band, suppressed carrier
- LSB for Lower Side Band, suppressed carrier
- CW for Carrier Wave (Morse)
- MCW for Modulated CW (Morse keyed on an AM transmitter) *Is the carrier keyed or not?*

If you can do so, check to see if an AM transmission reduces one of the two sidebands or its carrier as this can often prove a useful "fingerprint" of a station. It may also indicate a change of transmitter or a different transmitter once you get used to listening to a



particular station. Other, but more rarely heard modulation schemes include DSB (double sideband, suppressed carrier), Frequency Shift Keyed (FSK) Morse and Frequency Modulation.

#### 2.1.4. Station Name

If you know what you are hearing, then use the ENIGMA station names or reference numbers. For example, "Swedish Rhapsody", G15, M23 etc.

#### 2.1.5. Sex

For voice transmissions, record whether Male or Female. These are often abbreviated to M or F or denoted by their Amateur Radio Morse shortened forms — OM "Old Man" and YL "Young Lady"

#### 2.1.6. Language or Accent

For voice transmissions, record the language used by the station. Two letter codes (eg SS for Spanish) can be used. However, I prefer to use longer forms:

- Span for Spanish
- Ger for German
- Rus for Russian
- Eng for English, and so on

If you can notice a particular accent, add this too. For example, I use US/Eng for an English voice with an American accent.

### 2.2. Keeping Notes

In addition to the basics, you'll probably want somewhere in the logbook to record your notes or items of interest in what the station sends.

The transmission formats of most, but not all numbers stations follow a standard: some preamble, when the recipient of the message is usually called-up, followed by the number of groups to be sent which may, or may not, be preceded by a decoding key. Finally, the transmission is ended in some way, usually by sending a recognised "end of message" group such as 00000. Therefore, a log entry should ideally contain these details.

You might also like to note the general technical quality of the station. For example, whether the tape broke, whether the transmitter has a fault, or whether the keying waveform for a CW station is poor (eg "clicks", "chirp" etc).

#### 2.2.1. Preamble

Note tunes, how the identifier is spoken, and for how long the preamble is sent.

Listeners of morse numbers stations may wish to consider whether cut numbers are used, whether the number zero is sent as dah-dah-dah-dah-dah or as dah, and the keying speed in words per minute. Experienced CW listeners may also be able to recognise the "fist" if the transmission is hand-keyed and the station has more than one operator.

#### 2.2.4. The Repeat

Is the whole of the message repeated? How was the repeat introduced?

#### 2.2.5. The Ending

Make sure that you note the way in which the message ends:

- are the decode key and/or group count sent again?
- is there a tune?
- how many zeroes or other end-of-message indicators are sent, and what are they?

Once you get used to the format of a particular station, you'll know what you actually want to note (usually agent, key and group count), and what you take for granted. Here is an example of what my notes column has:

881-1/220/67 — for a Russian Man transmission indicates an agent of 881, decode key of 220 and 67 groups. I know that the -1 format of the message has single groups sent at 12 groups per minute and the message ends with 000, 000 and that there will only be one message sent in this transmission. The decode key and group count are sent only before the message. I might sometimes note the first ten groups of the message on the rear of the logsheet, in case something interesting is sent (I regularly find that some messages completely ignore certain numbers).

220, Count 206, 3/2F TFC — for a Counting Station indicates an ID of 220 and 206 groups of traffic (TFC) consisting of a 3/2 figure dictionary code.

498, 00000 (long, cut) — for the M14 Morse Numbers station. Note that I don't use a slash here. It could be confusing because some of the morse numbers stations actually send a slash as a separator. (long, cut) tells me that each zero was cut but were long ie daaaaah instead of dah-dah-dah-dah-dah.

555 253 12 27, 178 53 14 — for the M10 morse numbers station. Circuit number 555, first message to agent 253 with decode key 12 and 27 groups. Second message to agent 178 with decode key 53 and 14 groups.

#### 2.3. Format of the Logbook

Many people now keep their logbook on computer. I must admit that I'm still using a paper logbook. For the few stations that I have a real interest in, transcribe to a computerised database to ease the task of searching for patterns and schedules. What you do is basically up to whatever you feel most comfortable with. This issue of ENIGMA contains a suggested logsheet for you to copy and use.



### 2.2.2. Key and Group Counts

Most stations announce the group count(s) and may also give the decode key(s) for the message(s). If none of this information is sent by the station, make sure you write down the groups or at least count them. It may indicate that the station always sends a fixed number of groups, or that the recipient knows how many groups to expect.

### 2.2.3. The Message

Useful things to note, and which therefore characterise the way in which a station sends its messages include:

- are multiple messages sent in the same transmission?
- is each group sent once or twice?
- how many groups are sent in a minute?
- are letters or numbers used?
- what morse procedure signals are used? (AR, SK, BT etc)
- how many letters or digits make up a group?
- are there pauses after blocks of groups?
- how is each number or letter pronounced?
- what are the keying characteristics?
- is more than one voice or voice synthesiser used by the same station?
- is the transmission live or recorded?
- are certain numbers or letters given particular emphasis?
- are any letters or numbers never used in the message?

Most listeners use a standard form to denote the message group information concisely, here are some common examples:

- 5F = Five figure groups
- 4L = Four letter groups
- 3/2F = Three/Two Figure groups (often called dictionary code, where there is a distinct pause between the third and fourth figures).

If you are really dedicated to a particular station, you may actually wish to record every group as it is sent. This may later prove useful in spotting message trends or in other message analysis.

### **3. Some Logging Tips**

Over the years, I've found that it's useful to note a number of more esoteric things in the logbook too. Here are some examples:

#### **3.1. Daylight Saving Time**

Make a note in the log of when your country changed over to daylight saving time in the spring and also when normal time is resumed as winter approaches. Tracking these changes can tell you whether or not stations keep UTC or their own local time. Check when other countries change to daylight saving time as the date will vary from country to country. If you are close to switch-over date, check to see if your favourite station appears at its regular time, or if it is an hour later or earlier. If you know that the station keeps local time, it will have to move to the new time in the target country. This behaviour can give useful clues as to the location and/or target area of the station.

#### **3.2. Repeat Transmissions**

One of the benefits of proper logging is that basic schedule information is very easy to spot. A number of stations repeat the same messages on the same, or different frequency at another time. If I spot this, I mark the repeat transmission in the log.

#### **3.3. You've Missed the Start of the Message?**

I mentioned that it is useful to know the rate at which a station sends its traffic. For example, I know that one format of the Russian Man sends at a rate of 6 groups per minute. I also know that the group count is sent immediately before and after the message. Now, if I come across a transmission in full flow, I can wait until the group count is given at the end of the message and determine how long it must have taken to send it. From this, I can then work out when the transmission started and therefore catch it properly next time or fill in the schedule accurately.

Happy Logging and keep sending those logs in!



### THE CZECH STATIONS

This is probably the most complex family of numbers stations, of which the following are currently active:

1. M6/S16 (OLX)
2. S17 - the daily Czech lady 'control' station
3. M10 - has possibly partially replaced S10
4. M7 - closely related to above
5. M11 - very infrequent
6. S18/18A - always very infrequent
7. S19 - another 'control' station of similar format to S17

In addition to these, several stations no longer operate:

8. S10/10A - Simon Mason's 'Bulgarian Betty', same voice as the present S17.
9. S3 - the unique and mysterious Czech words station
10. S15 - Simon Mason's 'Rapid Dots' station, now OLX
11. S5 - Langley Pierce's OLX
12. M6A - The original Morse version of OLX

With insufficient historical information, making sense of all this isn't easy! Working from inadequate logs and memories from the past, I suspect that the only voice station operating in the '70's was S13. This consisted of a light-voiced woman repeating several common words in Czech, such as 'okno' (window). It ended 'konec' (pronounced konets in English, meaning 'end'). I still have a short recording of it.

At some stage in the '70's S8 began operating, a much more ambitious venture. Favoured frequencies were 3225,4030,4882 & 5680 amongst others. This was an extremely active station, being heard almost any time of day or night, on two frequencies simultaneously - but not in parallel. Beginning on the hour or half hour after a five minute interval signal - consisting of a short classical piano piece, never identified, this soon became as familiar on short wave as the ubiquitous trumpets of Radio Tirana! By 1985 this tune had been replaced by an uninspiring, nondescript series of five electronic tones, which had two distinct sequences. A typical format would be:

333 333 333 75988 75988 21 21 77613 77613 37 37 etc

This call lasted 5 minutes. The 333's represent the 'circuit number' - of which more later. The 5F groups are encrypted agent numbers, the 2F groups being group counts of respective messages - a traffic list of, say, five addressees was not unusual. This preamble was followed by "Pozor! Pozor!" (Attention! Attention!) "75988 75988 13 13 21 21" followed by 21 five figure paired random groups, the 13 being a 'group co-ordinate index' - unique to Czech stations. It serves a similar function to a 'decode key', in this case indicating which row, horizontally and vertically, (on the OTP) to locate the initial 5F group to commence decryption. The second message would follow on similarly. After all messages had been sent, the transmission would end with "Konec!"

The 'circuit number' was related to this station's unique and complex scheduling and frequency use which will be covered in a later article. 'Triplets' like 333, 444 etc always seem to have an operational significance in the esoteric world of Numbers Stations. Langley Pierce refers to a "rare idler form" of this station, which I never heard myself: "555 555 555 000" repeated for 5 minutes, then "Konec!". As we shall see this is significant in the light of present day activity.

S8 ended its life in either December 1990 or 91, and was replaced (or had it been there all along?) by an identical, but Morse, version - M10 - and a further station - S11 - using the same voice as S8 but a very different format and schedule.

M10's schedule is far less frequent than S8's but as far as I can tell, is regular and predictable. The call consists of a repeated equivalent of the voice preamble, with an important difference: encrypted 5F agent numbers have been replaced by regular non-encrypted 3F numbers, so that addressees can now be readily identified. The same ID's often crop up repeatedly and predictably over long periods. (see Morse News in this issue for an example). Transmissions consist of up to four messages each addressed to a different agent. The triplet sent is nearly always 555 and rarely 333 or 444 - others may exist. Like its predecessor, two frequencies are always used, but in this case, quite closely spaced and in parallel.

Closely related is the rare M11 station, identical to M10, but lacks the circuit number, its call being a single repeated 3F ID, sometimes in MCW (unlike M10). It never sends more than one message and may not use parallel frequencies.

Even more closely related is the frequent M7 station - never sending more than a single message, often, if not always, an identical message selected from one of an earlier M10 transmission. Triplets are not used, but instead strange tone sequences are sent at beginning and end for a minute each time. They may serve a similar purpose. (Further details of these stations appear in earlier Morse Supplements).

Unique features linking all these stations irrefutably confirm that one organisation is responsible for them. These features are: Triplet circuit numbers, 2F 'decode keys', identical messages on the M7 & M10 networks - for the same ID's, shared formats and many cases of shared frequencies.

However, the similarities don't end here! There is the secretive and elusive Czech man to entice out of the shadows, and of course, the most well known Czech network of them all, OLX, to investigate, not to mention the so-called 'control' stations. I will attempt to cover these in the next issue.



## ENIGMA RECOMMENDS

We recently received the latest copy of The Radio Books Catalogue from Interproducts publishers of 'Intercepting Numbers Stations' by "Langley Pierce".

Readers of ENIGMA may be interested in a new product advertised in the catalogue called The Audio Guide to the Sounds of Shortwave.....a cassette tape containing over 30 of the most commonly heard transmission sounds on the short wave bands.

In the first of our "Things That Go Buzz in the Night" features we wrote ...Short wave is full of all kinds of interesting noises, you only have to venture outside the broadcast bands to hear them ; most are well known and recognised forms of communications sent from authorised transmitters....and some are not.

But, and this is the question : how do I know what sound belongs to which mode or type ? "The Audio Guide to the Sounds of Shortwave" is a great help and an excellent way to find out.

The tape contains 31 of the most commonly heard transmission sounds on the shortwave bands. Each recorded off air to give the listener an authentic idea of how the signals sound. It is therefore an ideal introduction for newcomers to the shortwave bands who are faced with the sometimes unsurmountable task of deciding which transmission is which. Similarly, it will serve the more experienced listener equally well as a reference guide.

Included amongst the 31 recordings are Morse Code Telegraphy, Single Letter Beacons, Baudot RTTY, ARQ-M2, SITOR, Packet, MFSK Piccolo, NATO-Link 11, FAX, SSB, ISB, DSB, Bubble Jammers, 4 different Voice Encryption Systems, and Over The Horizon Radar, plus many more. (incidentally, the OTH radar featured & described as the 'woodpecker' was not this, now extinct, Russian Bird !). The cassette is recorded to a high standard and carries an "announced" recording number which you can follow through on the insert card.

The tape is priced at £4.95 inc  
UK Postage and Packing, add £1.00  
for airmail worldwide, from ;

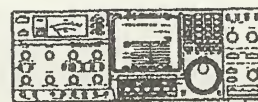
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ENIGMA has no connection  
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## AUDIO GUIDE TO THE SOUNDS OF SHORTWAVE

Recordings of the sounds of  
RTTY, CW, SITOR, FAX,  
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to help the listener identify the  
various transmissions  
active on the bands.  
Over 30 live recorded examples



## E.N.I.G.M.A. Bookshelf

### THE UNDERGROUND FREQUENCY GUIDE

*BY DONALD W. SCHIMMEL*

ISBN 1-878707-17-5, 1994, 209 pp

Welcome to our book review page, today we are taking a look at the recently published 3rd edition of *The Underground Frequency Guide* by Donald W. Schimmel, some readers may be familiar with Donalds monthly utility column 'Communications Confidential' published in the American magazine *Popular Communications*. He is also well know through articles in *Monitoring Times* and *Umbra et Lux*.

The *Underground Frequency Guide* is just that a broad look at unusual, illegal and covert radio communications, unlike 'Secret Signals' and 'Intercepting Numbers Stations' which concentrate on The Numbers Mystery TUGF takes a look at a selection of interesting family members.

*The book is split into five main headings -*

1) *NUMBER STATIONS* This gives background information on the subject and provides evidence of the link between Number Stations and Espionage, then follows details on Cut Numbers Broadcast Formats, Location Information and finally Anomalies.

2) *MONITORING MYSTERY NETWORKS* This chapter is particularly well detailed and looks at Covert CW Networks, it gives extensive details on transmission formats technical notes and even operator chatter. Details are also given about Cuban Diplomatic Traffic and a suspected Cuba/Russian Embassy in Washington Link.

3) *'FOUR PUZZLES'* Some well known mysteries are put under the microscope in this chapter. Single Letter High Frequency Markers (Beacons) are given a good going over first followed by FEMA the Federal Emergency Management Agency (a US suspicious civil defence organisation). Some readers to *ENIGMA* may have seen our brief mention of the 'KKN' stations which are examined in detail.

And last but not least what are the National Communication System upto ?

4) *'MISCELLANEOUS MYSTERY SIGNALS'* Readers of our section 'Things That Go Buzz in the Night' will enjoy this chapter which examines some 15 different odd transmission formats.

5) *'THE UNDERGROUND FREQUENCY LIST'* Some 50 pages of frequencies describe in detail how to monitor the many stations discussed in the book, and contains prosigns and abbreviations very clearly explained along with a detailed glossary.

If you are enjoy *ENIGMA* then I feel sure you will find the *Underground Frequency Guide* a very useful addition to your book-shelf.

Published by HIGHTEXT publications inc. P.O. Box 1489, Solano Beach  
CA 92075 USA

US Price \$14.95.

We will try and obtain further information on distribution of this book in our next issue.



Flying  
the flag  
for  
Morse

Number 34 - June 1994

# Morsum Magnificat

*The Morse Magazine*

ENIGMA have recently received a very encouraging write up in the magazine Morsum Magnificat thanks to the consultant editor Tony Smith G4FAI, the write up follows publication of part one of our ENIGMA special looking at morse Number Stations.....

We would like to return the compliment by telling ENIGMA readers about Morsum Magnificat, the magazine was first published as a quarterly in Holland, in 1983, by the late Rinus Hellemons PA0BFN.

Now published six times a year in Britain, it aims to provide international coverage of all aspects of Morse telegraphy, past present and future. Morsum Magnificat is for all Morse enthusiasts, amateur or professional, active or retired. It brings together material which would otherwise be lost to posterity, providing an invaluable source of interest, reference and record relating to the traditions and practice of Morse.

The magazine is very well presented and the sample we received runs to 50 pages and carries features comment readers letters and book reviews along with photographs and advertisements.

Indeed page 29 carries a photograph of a very interesting piece of Russian equipment marked N7138 5 1969r along with a comment about it's possible purpose: "perhaps this instrument was used to send coded messages in military or clandestine situations". The transmitting plate on the top of the case has numerals only, 1 to 0 plus the error signal (8 dots)....it seems a very interesting piece equipment !;

If you would like to know more about Morsum Magnificat the editorial and subscription offices are :

Morsum Magnificat, 9, Wetherby Close, Broadstone, Dorset,  
BH18 8JB, ENGLAND

Telephone/FAX : Broadstone (0202) 658474 ; International  
+ 44 202 658474

The Editor is Geoff Arnold G3GSR

# PRESS RELEASE

## RECORD COMPANY TO RELEASE CD OF SPY STATION RECORDINGS

### The CONET project

The Record Label IRDIAL-DISCS is to release a CD of recordings of the infamous NUMBERS STATIONS, which are heard with clockwork regularity on short wave 24hours a day all over the world.

The CD will include signal types from throughout the 30 year history of these stations, which are used by the worlds intelligence organizations to communicate with agents in the field.

Amongst the signal types to be included will be:

The MOSSAD Stations  
The BRITISH MAN  
BULGARIAN BETTY  
The 3 NOTE ODDITY  
The GERMAN CHILDS VOICE  
and many others.

These signals will be presented as received, and also in a de-noised version, which will be created with the SONIC SOLUTIONS noise profiling system.

Irdial-Discs is making a world wide call for submissions to the project. We are looking for tapes of any Numbers Station, especially those stations that are now no longer transmitting. All contributors will be fully credited.

An announcement has been made on the Internet, and all submissions will be received gratefully. Submissions can be made on any recording format, and all tapes will be returned to their owners. Recordings with logs are preferred, since this will be a historical documentation of the Numbers phenomenon; this work is to be catalogued in the British Library.

All contributions should be sent to:

Irdial-Discs  
Attn. NUMBERS  
Po box 424  
London SW3 5DY

Irdial-Discs can be contacted on:  
fax 44+171+351+4858  
email irdial@irdialsys.win-uk.net



MORSE STATION FORMAT CHART No 1

NIGMA EF. NO.	CALL	PREAMBLE	MESSAGE	REPEAT/FURTHER MESSAGES	ENDING
M1 ~	025 (R5)	381 381 40 40 = =	(40 x 5F)	.....▶	= = 381 381 40 40 000
M2	401 (R5)	* GR 45 (always multiple of five groups)	(45 x 5F)	'AR' GR45 (R msg)	'AR'
M3 ~	743/52 (R5)	= =	(52 x 5F)	= = 743/52 (x6) + (52 x 5f)	= = 000
∅:	743/00 (R5)	.....▶	.....▶	.....▶	= = 000
M4	U (R10)	L̄ L̄ L̄ L̄ L̄ L̄ / 75980 75980 (R5)	(100 x 5F) (always 100)	L̄ L̄ /75980 75980 = = (R msg)	'AR' SK 'AR' SK
M6	VV DE 0LX 0LX (R5) *	+ 425 425 425 425 425 425 = 011 011 (all R3)= 65 = (2nd grp. is always 011)	(65 x 5f) *	= 65 = (R msg)	= = 425 425 425
M7	(rapid dashes for 10 mins.) (*1, 1st tone sequence, R1)	* 109 109 109 54 54 27 27 = =	+(27 x 5 F)	.....▶	- = = 54 54 27 27 000 * (2nd tone seq., R1)
M10	(rapid dashes for 10 mins,*1) 555 555 555 253 253 253 26 (R5) Multiple messages: 555 555 555 253 253 253 26 966 966 966 45 (similarly for further msg.)	253 253 253 14 14 26 26 = =  (as above)	+(26 x 5F)  (as above)	.....▶  = = 14 14 26 26 966 966 966 32 32 45 45 = = +(45 x 5F)	- = = 14 14 26 26 000  - = = 32 32 45 45 000
M11	633 (R5)	274 274 36 36 = =	(36 x 5F)	.....▶	= = 274 274 36 36 000
M12	657 657 657 1 (R5) Two messages: 657 657 657 2 (R5)  ∅: 657 657 657 000 (R5) (not to be confused with M13A.)	+ 3176 3176 105 105 *  (as above)	(105 x 5f)  (as above)	.....▶  * 657 657 657 2 (R1) 215 215 94 94 *(94 x 5f)	* 000 000  * 000 000
M13	417 (R5)	= 125 23 =	(23 x 5f)	= 417 (x12) = 125 23 = (R msg)	= * _ _ _ _
M13A	417 417 417 000 (R5)	(as above)	(as above)	= 417 417 417 000 (all x4) (R msg)	(as above)

**KEY** ∅ : null message format      0̄ : letter O      0 : long zero      0 : short zero      msg ; message  
 \* : pause      \*1: one minute pause      R : repeat      R5 : repeat for 5 minutes  
 5f ; single 5 figure groups      5F : paired 5 figure groups      = : morse break symbol (BT)      'AR' : morse.....  
 + : sent faster      - : sent slower      ~ : speed variable      x ; times  
 All IN's. group counts etc. are examples only. M12 uses a 2 OR 3 figure decode key.

